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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/791,786	03/04/2004	Hirofumi Oda	0033-0918P	5328

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EXAMINER

HENN, TIMOTHY J

ART UNIT	PAPER NUMBER
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2622

NOTIFICATION DATE	DELIVERY MODE
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07/28/2008

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/791,786	Applicant(s) ODA ET AL.	
	Examiner Timothy J. Henn	Art Unit 2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 April 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments, see response, filed 30 April 2008, with respect to the rejection(s) of the claim(s) under 35 USC 102/103 over Shimamura have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Sato et al. (US 7,283,854).

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-6, 8, 10, 11 and 15-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sato et al. (US 7,283,854) in view of Shimamura (US 2003/0125080).

[claim 1]

Regarding claim 1, Sato discloses an image pickup device (Figure 1) comprising: a main body (Figure 1, Item 1); a camera for taking a picture (Figure 1, Item 8 or 10) and a display device displaying a picture taken from the perspective of the camera and arranged at a surface of the main body on the same side as the camera (Figure 1, Item 7 or 11; c. 4, ll. 66-67). However Sato does not disclose fixing the camera to the main

body such that the optical axis of the camera extends in a direction different from a direction perpendicular to a display surface of the display device.

Shimamura discloses a similar camera system wherein the camera is inclined relative to a display device so that the area captured by the camera matches an area of the display device; Paragraph 0074). It is noted that such an inclination of the camera reduces parallax in the captured image. Therefore, it would be obvious to incline the camera of Sato as taught by Shimamura so that a user looking at the display device while being imaged does not look as if the user is looking away from the camera.

[claim 2]

Regarding claim 2, Sato discloses a camera on one side of vertically opposite sides of the display device (Figure 1). Shimamura discloses inclining a camera towards an opposite sides of the display (Figure 7). Therefore, it would be obvious to incline the camera of Sato towards the opposite vertical side of the display.

[claim 3]

Regarding claim 3, Sato in view of Shimamura does not disclose arranging the camera on a lateral side of the display device and inclining the camera towards the opposite lateral side. Official Notice is taken that it is well known in the art that cameras can be arranged on a lateral side of a display device instead of on a vertical side. Therefore, it would be obvious to place the camera on a lateral side of the display to provide alternate designs for the image capture apparatus. Furthermore, since Shimamura discloses inclining the camera towards a user, it would be obvious to incline

the camera towards the opposite lateral side as claimed (Paragraph 0074).

[claim 4]

Regarding claim 4, Sato discloses a display device which is a main display device (Figure 1, Item 7 or 11) arranged on one of opposite surfaces of the main body, the image pickup device further comprises a sub-display portion arranged on the other surface of the main body (Figure 1, Item 11 or 7) and the camera and the main display portion are arranged on one of the opposite surfaces of the main body (Figure 1). Since the claim as written does not define the main or sub-displays in any manner other than location, display 7 and 11 can be considered either a main display or a sub-display.

[claim 5]

Regarding claim 5, Sato discloses a main display portion arranged on one of opposite surfaces of the main body (Figure 1, Item 7 or 11); wherein the display device is a sub-display portion arranged on the other surface of the main body (Figure 1, Item 11 or 7), and the camera and the sub-display are arranged on the other surface of the main body (Figure 1). Since the claim as written does not define the main or sub-displays in any manner other than location, display 7 and 11 can be considered either a main display or a sub-display.

[claim 6]

Regarding claim 6, Sato discloses a main body formed of first and second bodies foldably coupled together (Figures 1 and 19) and the camera and display device are arranged on the first body (Figure 1, top half).

[claim 8]

Regarding claim 8, Sato does not disclose a main body which is formed of a single body. Official Notice is taken that camera phones, such as the image pickup device disclosed by Sato in view of Shimamura, are commonly produced in “flip-phone style” (i.e. Figure 1 of Sato) where the phone is comprised of two bodies and a hinge, or “candy bar style” in which the phone is comprised of a single elongated body. Therefore, it would be obvious to one of ordinary skill in the art at the time the invention was made to use a single body as claimed for the structure of the camera phone such since such a construction is a well known art recognized equivalent that would provide greater choice to the users.

[claim 10]

Regarding claim 10, Sato discloses an additional camera arranged on the main body (Figure 1, Item 10 or 8), wherein the main body has a structure formed of first and second bodies foldably coupled together (Figure 1), and the camera and the additional camera are arranged on one of the first and second bodies (Figure 1, note both cameras are on the same section).

[claim 11]

Regarding claim 11, Sato discloses first and second cameras formed on different surfaces of one of the first and second bodies, respectively (Figure 1; note cameras are on front and back of the same section).

[claim 15]

Regarding claim 15, Sato discloses an image pickup device (Figure 1) comprising: a main body having a first side and a second side (Figure 1, Item 1); a

camera for taking a picture fixed to the main body first side and having an optical axis (Figure 1, Item 8 or 10); and a first display device including a display surface displaying a picture taken by the camera and arranged on the first side (Figure 1, Item 7 or 11; c. 4, ll. 66-67). However, Sato does not disclose fixing the camera such that the optical axis extends in a direction different from a direction perpendicular to the display surface.

Shimamura discloses a similar camera system wherein the camera is inclined relative to a display device so that the area captured by the camera matches an area of the display device; Paragraph 0074). It is noted that such an inclination of the camera reduces parallax in the captured image. Therefore, it would be obvious to incline the camera of Sato as taught by Shimamura so that a user looking at the display device while being imaged does not look as if the user is looking away from the camera.

[claim 16]

Regarding claim 16, Sato discloses a first display device including first and second vertically opposite sides (Figure 1, Item 7 or 11). Shimamura discloses inclining the camera towards an opposite vertical side from which it is located, therefore, it would be obvious to incline the camera of Sato towards an opposite vertical side as claimed.

[claim 17]

Regarding claim 17, see claim 4.

[claim 18]

Regarding claim 18, Sato discloses a second display device on a second side of the main body (Figure 1, Item 11 or 7).

[claim 19]

Regarding claim 19, Sato discloses first display device comprising a main display portion and a second display device comprising a sub-display portion (Figure 1). Since the claim as written does not define the main or sub-displays in any manner other than location, display 7 and 11 can be considered either a main display or a sub-display.

[claim 20]

Regarding claim 20, Sato discloses a first display device comprising a sub-display portion and a second display device comprising a main display portion (Figure 1). Since the claim as written does not define the main or sub-displays in any manner other than location, display 7 and 11 can be considered either a main display or a sub-display.

4. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sato et al. (US 7,283,854) in view of Shimamura (US 2003/0125080) in view of Kawasaki (US 7,173,665).

[claim 7]

Regarding claim 7, Sato in view of Shimamura discloses a main body having first and second bodies foldably coupled together (Sato, Figure 1), but does not disclose arranging the display on the first body and the camera on the second body as claimed.

Kawasaki discloses a similar image pick-up device including foldably coupled bodies including a display camera and camera (Figure 4B). Kawasaki further discloses that the display (Figure 4B, Item 21) may be placed on the first body and the camera (Figure 4B, Item 22) may be placed on the second body. Therefore, it would be obvious

to place the display and camera on the first and second bodies respectively so that the camera and displays are not required to share the same body.

5. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sato et al. (US 7,283,854) in view of Shimamura (US 2003/0125080) in view of Iida (JP 2003-051872).

[claim 9]

Regarding claim 9, Sato in view of Shimamura discloses a main body formed of first and second bodies foldably coupled together (Figure 1) and a camera arranged on the first body (Figure 1, Item 8 or 10), but does not disclose an additional camera arranged on the second body.

Iida discloses an image pickup device including a display and a first camera (Figure 5, Item 2L) formed on a first body and a second body foldably coupled to the first body which includes a second camera (Figure 5, Item 2R) allowing for stereoscopic or panoramic image capture. Therefore, it would be obvious to one of ordinary skill in the art at the time the invention was made to arrange a second camera on the second body of Sato in view of Shimamura as taught by Iida to allow for stereoscopic or panoramic image capture.

6. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sato et al. (US 7,283,854) in view of Shimamura (US 2003/0125080) in view of Kuroda (US 2003/0036365).

[claim 12]

Regarding claim 12, Sato in view of Shimamura discloses first and second cameras, wherein at least a first camera is inclined relative to a display. However, Sato in view of Shimamura does not explicitly disclose that the second camera has an optical axis which is perpendicular to the display surface of the display device.

Kuroda discloses a similar device including first and second cameras and further discloses using a first one of the cameras for close range photography and a second one of the cameras for long range photography (Paragraphs 0036-0037). Therefore, it would be obvious to utilize the first and second cameras of Sato in view of Shimamura for close and long range photography respectively. As taught by Shimamura, it would be obvious to incline at least one of the cameras for capturing images such as a images of a user. Furthermore, as taught by Kuroda, it would be obvious to maintain a perpendicular optical axis relative to the display device for the long range camera since the long range camera is meant for capturing objects far away from the camera where parallax between the display and the camera is not an issue.

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7. Claims 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sato et al. (US 7,283,854) in view of Shimamura (US 2003/0125080) in view of Koizumi (US 6,259,470).

[claim 13]

Regarding claim 13, Sato in view of Shimamura discloses a camera arranged on the same side as a display, but does not disclose an additional camera arranged on that same side.

Koizumi discloses placing multiple cameras on the same side as a display and using the multiple cameras to form a virtual camera at a position coincident with the display device to reduce parallax. Therefore, it would be obvious to arrange multiple cameras on a same side so that a virtual camera could be formed to further reduce parallax between the display device and the camera of Sato in view of Shimamura.

[claim 14]

Regarding claim 14, Koizumi discloses cameras vertically and laterally near the display device. Shimamura discloses angling the cameras towards an opposite side of the display device from the side which the camera is located. Therefore, it would be obvious to incline the cameras towards a user (e.g. the opposite side of the display from which the camera is located) to further reduce parallax of the captured images.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy J. Henn whose telephone number is (571)272-7310. The examiner can normally be reached on M-F 11-7.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lin Ye can be reached on (571) 272-7372. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Timothy J Henn/
Primary Examiner, Art Unit 2622